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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

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Ref: 8EPR-ER

May 22, 2006

Mr. David Wilson PacifiCorp, Power Delivery 825 NE Multnomah, Suite 1700 Portland, OR 97232

RE:

Vermiculite Intermountain Libby Asbestos Site

Dear Mr. Wilson:

I am writing regarding the cleanup of Libby amphibole asbestos (LA) from a property owned by PacifiCorp located at 147 South 400 West, Salt Lake City, Utah. As you know, this was formerly the site of a vermiculite exfoliation plant which processed thousands of tons of vermiculite ore which was contaminated with LA from a mine in Libby, Montana. PacifiCorp excavated over 16,000 cubic yards of LA-contaminated soils left behind by the exfoliation operation. Some LA could not be excavated and remains in the subsurface soils at the site because of high voltage lines underground, the presence of old building foundations, and other factors.

According to PacifiCorp's final report dated September 14, 2005, 4 sampling zones did not have any detectable LA following the excavation, and 18 zones did have detectable LA at concentrations of less than 0.2 percent (commonly called "trace levels"). A minimum of 12 inches of clean fill was placed over the excavation and in some areas, there are several feet of clean fill between the unexcavated soil and the ground surface. In addition, areas at the bottom of the excavation which had LA concentrations greater than one percent were covered with orange construction fencing prior to backfilling to serve as a visual reminder of the underlying contamination.

If there are future construction activities at the site by PacifiCorp or other parties which could disturb the soils underlying the clean fill, precautions should be taken to guard against LA exposure. There are three general principles to keep in mind:

- 1. Existing asbestos regulations
- 2. Worker health and safety
- 3. Protection of the remedy

1. Existing Asbestos Regulations - The federal government and the State of Utah have regulations regarding asbestos worker certification and asbestos work practices. These rules generally apply to "asbestos containing material" (ACM) which means any material containing more than one percent asbestos, according to the definition set forth in the regulations. Therefore, any activity at the site which triggers the regulations should be conducted in compliance with the regulations.

However, it should be noted that the one percent asbestos concentration levels commonly cited and used for regulatory purposes under the EPA Toxic Substances Control Act (TSCA) abatement program and other similar laws were established on the basis of analytical capability at the time and do not have any relationship to the actual health risks associated with the handling or disturbance of the contaminated material in question. This leads to principle number two, worker health and safety.

2. Worker Health and Safety - The U.S. Occupational Safety and Health Administration (OSHA) has regulations for workers exposed to asbestos, including permissible exposure limits (PELs), employee notification, monitoring methods, etc. The OSHA regulations state that the employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fibers per cubic centimeter of air as an eight (8)-hour time-weighted average (TWA) as determined by the method prescribed in the regulations. Any activity at the site which triggers the OSHA regulations should be conducted in compliance with the regulations.

It should be noted that when OSHA established this PEL for workers, it stated that its "risk assessment....showed that reducing exposure to 0.1 f/cc would further reduce, but not eliminate, significant risk." These health risks are further discussed in EPA's endangerment memo dated March 18, 2004, which was attached to the Action Memo for the cleanup at this Site.

In addition, investigations by EPA have found that soils contaminated with very low concentrations of asbestos can easily result in high airborne fiber exposures when disturbed. Therefore, the soils at the site which contain detectable LA at trace levels less than 0.2 percent could generate airborne concentrations of asbestos that are potentially hazardous when disturbed.

EPA recommends that worker and bystander exposures to asbestos at the site be kept to an absolute minimum, even if the OSHA regulations are not triggered. EPA recommends that the employer consider respiratory protection, employee training, engineering controls (e.g., wetting or containment), air monitoring, etc. as relevant and appropriate practices if soils containing trace levels of LA in the subsurface at the site must be disturbed.

3. Protection of the Remedy - PacifiCorp has spent considerable time, funds, and effort to clean up over 16,000 cubic yards of contaminated soils at the site. Clean fill has been placed over the entire surface of the PacifiCorp property to prevent exposure to LA. Any construction activity that will disturb LA in the subsurface must not be allowed to re-

contaminate the ground surface or the cap of clean fill. Plans should be made in advance of any construction activity to prohibit any soils containing any detectable LA removed from the subsurface from mingling with soils above that were replaced as clean fill. All excavated soils containing or suspected of containing any detectable LA must be disposed of off-site at a facility permitted to accept asbestos waste. EPA strongly recommends that excavated soil containing or suspected of containing any detectable LA be treated as "asbestos-containing material" (ACM) for disposal purposes even if the LA concentrations are below one percent. Pursuant to CERCLA and the National Contingency Plan, excavated soil containing LA could be considered a hazardous substance and could be subject to regulation and enforcement if improper handling resulted in actual or potential exposures to human populations, among other factors.

EPA recommends that a workplan be developed in advance for any activity which is anticipated to disturb LA-containing soils in the subsurface at the site. The workplan should take into account all the principles above to ensure compliance with any applicable regulations, protection of worker health and safety, and protection of the remedy.

Thank you very much for the excellent work performed on this project and your cooperation in the continued management of this site. If you have questions, please call me at (303) 312-6822.

Sincerely,

Joyce Ackerman

On-Scene Coordinator

Cc: Craig Barnitz, UDEQ